

THE OLD WORLD MEMBRACIDAE

BY FREDERIC W. GODING

(Continued from Vol. LVII, p. 272)

LIST OF SPECIES

- australis* Fairmaire, Rev. Memb. p. 518. (1846). Gosford, N. S. W.; Victoria; Tasmania; Williamstown, S. Australia.
- castaneus* Distant, Ann. Mag. N. H. xviii, p. 25. (1916). Australia.
- insularis* Distant, Ann. Mag. N. H. xviii, p. 26. (1916). New Britain Is., New Guinea.
- obstans* Walker, List Hom. B. M. Suppl. p. 162. (1858). Tasmania.
- binotatus* Walker, Ins. Saund. Hom. p. 81. (1858). New Holland.
- hospes* Kirkaldy, Bul. Exp. Sta. Haw. S. P. Assoc. (1), ix, p. 378. (1906). Sydney, N. S. W., Australia.
- affinis* Distant, Ann. Mag. N. H. xviii, p. 25. (1916). New South Wales, Australia.

Centruchus

- Stål, Hemip. Afric. iv, p. 93. (1866); *Leucothorax* Buckton, Tr. Linn. Soc. Lond. Zool. (2), ix, p. 334. (1905).

KEY TO SPECIES

- 1(4). Suprahumeral broad, at least long as the intervening space, tips truncate; pronotum black.
- 2(3). Suprahumeral horizontal, longer than intervening space, carinate on upper surface behind middle, legs pale brown; tegmina subopaque ferruginous, faint median whitish transverse band, apical veins slightly nodulose; 6 × 6 mm. **laticornis**
- 3(2). Suprahumeral weakly oblique, long as intervening space, not carinate above; tegmina subhyaline, pale transverse median band; legs black; 7 × 4.5 mm. **cuneatus**
- 4(1). Suprahumeral horizontal, slender, acuminate, not more than half as long as the intervening space, tips acute.
- 5(6). Head and pronotum bluish black, legs purplish red; suprahumeral one-fourth as long as the intermediate space, dorsum of posterior process straight; tegmina vinaceous hyaline, basal area black; 7 × 4 mm. **mutilis**
- 6(5). Head and pronotum piceous, legs ochraceous; basal half of posterior process ochraceous, dorsum depressed at base, middle elevated; tegmina subhyaline, basal area brown, median broad black transverse band; 7 × 4 mm. **decoratus**

LIST OF SPECIES

- laticornis* Funkhouser, Jour. Str. Br. Roy. Asiat. Soc. p. 9. (1918). Singapore.
- cuneatus* Distant, Faun. Brit. Ind. iv, p. 56, fig. 49. (1908). Sookna, India.
- mutilis* Distant, Faun. Brit. Ind. vi, App. p. 168, fig. 123. (1916). Maymyo, Burma.
- decoratus* Distant, Faun. Brit. Ind. iv, p. 58, fig. 50. (1908). Momeit, Burma.

Eufairmairia

- Distant, Ann. Mag. N. H. xviii, p. 35. (1916).

KEY TO SPECIES

- 1(20). Suprahumeral oblique, multicarinate, posterior process tricarinate.
- 2(17). Posterior process long as tegmina or nearly so; suprahumeral distinctly obliquely elevated.
- 3(6). Suprahumeral evidently longer than the space between bases.
- 4(5). Suprahumeral more than twice as long as the intervening space, sides parallel, flat, broad, tips truncate; tegmina pale lurid, base and most of costal area ferruginous; 9 mm. **decisus**
- 5(4). Suprahumeral about one and a half times longer than space between bases, very robust, triquetrous, narrowed toward tips the latter truncate the hind angle acute; basal fourth of posterior process robust thereafter slender; black, very rugose; tegmina ferruginous opaque, large central area paler subopaque, white spot behind apex of clavus; 12 × 6 mm. **giganticus**
- 6(3). Suprahumeral about equal in length to the intervening space.
- 7(10). Tips of suprahumeral acute; tegmina pale hyaline.
- 8(9). Dark or pale brown, head and basal area of metopidium black; finely punctate; posterior process long as tegmina; 7-8 × 3.5-5 mm. **tepperi**
- 9(8). Black, rugose, suprahumeral slightly shorter, posterior process a little shorter than tegmina; 7 mm. **densus**
- 10(7). Tips of suprahumeral truncate or roundly truncate; tegmina pale hyaline, base and costal area ferruginous or brown.
- 11(14). Suprahumeral broad, flat, sides parallel; tegmina subhyaline.
- 12(13). Head, pronotum and basal area of costal margin dark purplish brown, legs paler; tips of suprahumeral roundly truncate hind angle acute; 7-8 × 5 mm. **consobrinus**
- 13(12). Entirely piceous, finely rugose, basal area of tegmina brown; tips of suprahumeral truncate; 8 × 5 mm. **relatus**
- 14(11). Suprahumeral narrowed from base, robust, tips slightly roundly truncate, apex of posterior process a little shorter than the tegmina.

- 15(16). Brown, head blackish, shining black spot above each eye, scutellum yellow, tibiae yellowish brown; tips of suprahumeralis lightly rounded outwardly; $8.5-9 \times 5$ mm. **acanthaspis**
- 16(15). Dull testaceous, legs paler; tips of suprahumeralis straight, slightly obliquely roundly truncate; $7-8 \times 4.5-5$ mm. **fraternus**
- 17(2). Suprahumeralis weakly oblique, lightly elevated.
- 18(19). Posterior process about as long as the tegmina, basal fourth thick, sides of suprahumeralis nearly parallel, tips roundly truncate hind angle acute; brown, head darker; 7×5 mm. **curvicaudus**
- 19(18). Posterior process not passing apex of clavus, basal two-thirds robust thereafter slenderer, tips of suprahumeralis roundly truncate hind angle acute; black, scutellum ochraceous; tegmina pale bronze with darker suffusions, base black, a pale subbasal transverse fascia; 7×5 mm. **distinctus**
- 20(1). Suprahumeralis horizontal, posterior process almost as long as the tegmina, base thick, apical area slender.
- 21(22). Suprahumeralis twice as long as the intervening space, broad, sides parallel, tips rounded and very briefly acute at middle; brown, metopidium very high with black spot above each eye; tegmina fusco-hyaline, base and costal area reddish brown; 9×6.8 mm. **laticornis**
- 22(21). Suprahumeralis half as long as the intervening space, narrowed from base, tips obliquely truncate hind angle acute; piceous brown metopidium darker, rugose; tegmina colorless hyaline, base broadly ferruginous; 6×4 mm. **brevicornis**

LIST OF SPECIES

- decisus** Walker, List Hom. B. M. p. 621. (1851). New Holland; Murray Bridge, S. Australia.
- giganticus** Goding, Mon. Aust. Memb. p. 20, pl. 1, fig. 1. (1903). S. Australia.
- tepperi** Goding, Mon. Aust. Memb. p. 22. (1903). Bunbury, W. Australia.
- cupreus** Distant, Ann. Mag. N. H. xviii, p. 38. (1916). Yallingup, W. Australia.
- densus** Walker, Jour. Linn. Soc. i, p. 163. (1857). Sarawak, Borneo.
- consobrinus** Distant, Ann. Mag. N. H. xviii, p. 37. (1916). Gayndah, Rockhampton, Peak Downs, Queensland; Coolabah, N. S. W.; Mallee, Victoria, Australia.
- relatus** Distant, Ann. Mag. N. H. xviii, p. 36. (1916). Gayndah, Queensland, Austrlia.
- acanthaspis** Fairmaire, Rev. Memb. p. 515. (1846). Sydney, Tweed, R., Tamworth, Wellington, N. S. W.; Highfields, Queensland; Murray R., S. Australia.
- harrisi** Distant, Ann. Mag. N. H. xviii, p. 35. (1916). Queensland, Australia.

- fraternus** Distant, Ann. Mag. N. H. xviii, p. 36. (1916). Gayndah, Gatton, Queensland; Capertee, Rylstone, Lyndhurst, N. S. W., Australia.
- curvicaudus** Goding, Mon. Aust. Memb. p. 24. (1903). Tweed R., N. S. W., Australia.
- acanthaspis** Distant, Ann. Mag. N. H. xviii, p. 38. (1916). Rockhampton, Queensland, Australia.
- distinctus** Distant, Ann. Mag. N. H. xviii, p. 38. (1916). Port Darwin, N. Australia.
- laticornis** Funkhouser, Rec. Aust. Mus. xv, p. 307, pl. 26, figs. 5, 6. (1927). Fly River, New Guinea.
- brevicornis** Goding, Mon. Aust. Memb. p. 21. (1903). S. Australia; Mt. Barker, W. Australia.

Sextius

- Stål, Hemip. Afric. iv, p. 88. (1886); *Pterosticta* Buskton, Mon. Memb. p. 230. (1903).

KEY TO SPECIES

- 1(12). Posterior process as long or longer than the tegmina.
- 2(7). Suprahumerals extended more or less obliquely forward.
- 3(6). Suprahumerals porrect, twice as long as width of base.
- 4(5). Brown, median carina black, tegmina milky hyaline, translucent, basal area brown; suprahumerals flat, bases not distant, tips truncate; 6×3 mm. **projectus**
- 5(4). Greenish or yellowish, median carina red, tegmina hyaline; suprahumerals distant between bases, tips obtuse, dark sometimes forming broad band across pronotum; $7-8 \times 3-4$ mm. **rubrilineus**
- 6(3). Suprahumerals lightly inclined forward, robust, tips subacute; greenish yellow, head and legs darker, tegmina concolorous, apical half more hyaline; $6-7 \times 3-3.5$ mm. **bucephalus**
- 7(2). Suprahumerals transversely oblique or horizontal, not inclined forward.
- 8(11). Suprahumerals horizontal, very short, about long as broad.
- 9(10). Pale testaceous, tegmina subhyaline, wrinkled, frequently some scattered black spots; apical area of posterior process recurved, tips of suprahumerals acute; 9×4 mm. **major**
- 10(9). Yellow or greenish, head, broad transverse band including suprahumerals and legs brown, apical area of tegmina hyaline; posterior process straight; 7×3 mm. **spretus**
- 11(8). Suprahumerals heavy, strongly oblique, twice longer than the basal width, tips blunt, front side only carinate; posterior process straight, depressed, heavy; tegmina hyaline; 6×3 mm. **occidentalis**
- 12(1). Posterior process shorter than the tegmina.

- 13(20). Suprahumeral transversely oblique or horizontal, not inclined forward.
- 14(19). Suprahumeral very short, horizontal.
- 15(18). Suprahumeral robust, tips straight, not depressed.
- 16(17). Ochraceous, head, transverse band between suprahumeral, and femora black; apical half of tegmina subyaline; 6.5×2.5 mm.
reticulatus
- 17(16). Pale greenish, dorsum pale purplish red anteriorly between suprahumeral, legs ochraceous; tips of tegmina brownish, large black spot on upper basal area; $5-6 \times 3$ mm. atromaculatus
- 18(15). Suprahumeral about equal in size to humeral, conical, tips lightly depressed, obtuse; dorsum of posterior process strongly arcuate from base; apical half of tegmina reticulate; pale yellow, chest piceous; $5-7 \times 2-3$ mm. depressus
- 19(14). Suprahumeral weakly oblique, about twice as long as basal width, tips subacute, posterior process nearly straight; pale greenish yellow, with or without transverse fuscous band between suprahumeral, median carina often ferruginous; tegmina hyaline, basal area green or tawny; $7-8 \times 4-4.5$ mm.
virescens
- 20(13). Suprahumeral lightly inclined forward, very short, pronotum deeply impressed above basal margin; entirely testaceous; $6.5-7.75 \times 2.25-3.5$ mm. bipunctata

LIST OF SPECIES

- projectus** Funkhouser, Rec. Aust. Mus. xv, p. 312, pl. 26, fig. 16. (1927). King George's Sound, West Australia.
- rubrilineus** Buckton, Mon. Memb. p. 230, pl. 51, fig. 5. (1903). Bursaria, W. Australia.
- xantha* Buckton, Mon. Memb. p. 231, pl. 51, fig. 7. (1903). Bursaria, West Australia.
- bucephalus** Distant, Ann. Mag. N. H. xviii, p. 34. (1916). Peak Downs, Gayndah, Queensland, Australia.
- major** Distant, Ann. Mag. N. H. xviii, p. 34. (1916). Peak Downs, Gayndah, Queensland, Australia.
- spretus** Buckton, Mon. Memb. p. 230, pl. 51, fig. 5. (1903). Adelaide, S. Australia.
- longinotum* Kirkaldy, Rept. Exp. Sta. Haw. S. P. Assoc. ix, p. 377. (1906). Nelson, Queensland, Australia.
- occidentalis** Jacobi, Faun. S-W Australia, Hom. ii, p. 338, figs. 1, 2. (1909). Brown Station, Pinjarrah, W. Australia.
- reticulatus** Distant, Ann. Mag. N. H. xviii, p. 34. (1916). N-W Australia.
- atromaculatus** Distant, Ann. Mag. N. H. xviii, p. 35. (1916). N. Queensland, Australia.
- depressus** Goding, Mon. Aust. Memb. p. 12, pl. 1, fig. 24. (1903).

- Blue Mts., Tweed R., Maitland, Kemsey, Sydney, N. S. W.; Townsville, Kuranda, Brisbane, Queensland, Australia.
- virescens* Fairmaire, Rev. Memo. p. 515. (1846); Goding, Mon. Aust. Memb. p. 10, pl. 1, fig. 2. (1903); Buckton, Mon. Memb. p. 228, pl. 51, fig. 3. (1903). Tarago, Clarence R., Gosford, Loftus, Wollongong, Bungendere, Homebush, Maitland, Sydney, Penrith, Kensey, Uralla, Newcastle, N. S. W.; Brisbane, Townsville, Queensland; Melbourne, Victoria; Adelaide, S. Australia.
- suffusa* Walker, List Hom. B. M. p. 530. (1851). Unknown.
- assimilis* Kirkaldy, Rept. Exp. Sta. Haw. S. P. Assoc. ix, p. 376. (1906). Sydney, N. S. W., Australia.
- bipunctata* (Fabr.) Kirkaldy, Rept. Exp. Sta. Haw. S. P. Assoc. ix, p. 376. (1906). Cairns, Bundaberg, Queensland, Australia.
- kurandæ* Kirkaldy, Rept. Exp. Sta. Haw. S. P. Assoc. ix, p. 377. (1906). Kuranda, Townsville, Queensland, Australia.

Periaman

Distant, Faun. Brit. Ind. iv, p. 37. (1908).

KEY TO SPECIES

- 1(12). Suprahumeral at least as long as space between bases, posterior process shorter than tegmina.
- 2(3). Suprahumeral twice as long as the intervening space, strongly oblique; pronotum brown, base and head piceous, basal area of posterior process ochraceous, apical area piceous, legs ochraceous; 6 × 3 mm. **pyropinus**
- 3(2). Suprahumeral long as the intervening space.
- 4(5). Front of pronotum with one central and two lateral longitudinal yellow tomentose stripes with common origin, the latter passing beneath suprahumeral and uniting on base of posterior process; suprahumeral moderately oblique the front margin laminate, posterior process heavy, apical half slender; brown, tegmina ochraceous, apical area bronze; 9 × 4.5 mm. **flavolineatus**
- 5(4). Front of pronotum destitute of tomentose stripes.
- 6(11). Suprahumeral moderately oblique, recurved.
- 7(10). Black.
- 8(9). Tegmina pale bronze hyaline, base and costal area to apex black; suprahumeral with front and hind margins broadly laminate, white tomentose stripe beneath each, posterior process heavy, apical half slender; 8.5-9 × 5 mm. **wallacei**
- 9(8). Tegmina bronze brown, basal area blackish, pronotum shining black, densely long pilose; posterior process gradually acuminate; 8 × 3 mm. **pilosus**
- 10(7). Purplish brown, head blackish, yellow pubescent, tegmina vinaceous hyaline; posterior process slender; 10 mm. **nitobel**
- 11(6). Suprahumeral weakly oblique, almost horizontal, triangular; teg-

mina vinaceous hyaline, base, costal and apical areas brown, median veins spined; black, legs brown; 7.7×4.8 mm.

rectidorsum

- 12(1). Suprahumerals shorter than space between bases, posterior process shorter than tegmina.
- 13(14). Pronotum black with a central and two lateral longitudinal white tomentose stripes having a common origin at the base in front, the lateral stripes passing beneath suprahumeral and uniting on base of posterior process; tegmina gray hyaline; 8 mm.

limbatus

- 14(13). Front of pronotum destitute of tomentose stripes; tegmina smoky hyaline, base black, tips fuscous.
- 15(16). Entirely black; suprahumeral distinctly oblique, front margin curved, posterior process heavy; veins of tegmina spined; 5.5×3.2 mm. **nigris**
- 16(15). Blackish brown, tarsi flavous; suprahumeral almost horizontal, posterior process robust, gradually acuminate, middle and apex lightly depressed; 7×3.6 mm. **brevifrons**

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- pyropinus** Distant, Faun. Brit. Ind. iv, p. 38, fig. 31. (1908). Ruby Mines, Burma.
- flavolineatus** Buckton, Mon. Memb. p. 247. (1903); Distant, Faun. Brit. Ind. iv, p. 38, fig. 30. (1908). Tenasserim, Myitta, Mergui, India.
- wallacei** Distant, Ann. Mag. N. H. xvii, p. 320. (1916). Sarawak, Sandakan, Borneo.
- pilosus** Distant, Faun. Brit. Ind. vi, App, p. 157. (1916). Kurseong, E. Himalayas, India.
- nitobei** Matsumura, Anot. Cic. Japan, viii, p. 17. (1912). Aomori, Sambogi, Japan.
- rectidorsum** Funkhouser, Bul. Brook. Ent. Soc. xxii, p. 107, pl. 6, figs. 4-6. (1927). Anai Kloof, Sumatra.
- limbatus** Walker, Jour. Linn. Soc. 1, p. 163. (1857). Sarawak, Borneo.
- nigris** Funkhouser, Rec. Aust. Mus. xv, p. 306, pl. 26, figs. 3, 4. (1927).
- brevifrons** Funkhouser, Phil. Jour. Sci. x, p. 383, pl. 1, fig. 8. (1915). Palawan, Puerta Princesa, Philippines.

Centrotypus

- Stål, Hemip, Afric. iv, p. 88. (1866); *Ibiceps* Distant, Ann. Mag. N. H. xvii, p. 150. (1916); *Lestarches* Distant, Ann. Mag. N. H. xvii, p. 318. (1916).

KEY TO SPECIES

- 1(40). Blue black or black.
- 2(25). Pronotum blue black, costal margin of tegmina blackish or brown.
- 3(22). Apical area of tegmina largely brownish or blackish, large central area more or less hyaline.

- 4(21). Suprahumeral at least as long as the space between bases.
- 5(10). Suprahumeral gradually acuminate.
- 6(7). Expanse of suprahumeral almost equal to entire length to tips of tegmina, posterior process nearly long as tegmina; 9×8.5 mm. **anchorago**
- 7(6). Expanse of suprahumeral distinctly less than length to tips of tegmina, posterior process extended some beyond apex of clavus.
- 8(9). Base of posterior process armed with a small tooth, suprahumeral shorter; 9×4 mm. **pactolus**
- 9(8). Base of posterior process not dentate; suprahumeral longer; 9×7 mm. **tauriformis**
- 10(5). Suprahumeral equally broad, tips obliquely truncate, rounded, roundly truncate, hind angle subacute.
- 11(14). Expanse of suprahumeral equal or almost equal to entire length of body to tips of tegmina; posterior process extended far beyond apex of clavus.
- 12(13). Suprahumeral expanse equal to total length of body, moderately broad, more than twice longer than broad, horizontal, tricarinate above, tips roundly oblique; 10×10 mm. **securis**
- 13(12). Suprahumeral expanse slightly less than total length of body, very broad, slightly less than twice longer than broad, lightly curved upwardly and recurved, strongly depressed, subfoliaceous anteriorly unicarinate above, tips rounded; 9×8 mm. **amplicornis**
- 14(11). Expanse of suprahumeral distinctly less than length of body to tips of tegmina.
- 15(20). Tips of suprahumeral broadly obliquely rounded in front.
- 16(19). Posterior process extended far beyond apex of clavus.
- 17(18). Suprahumeral horizontal, shorter, very lightly curved upwardly; 8.5×7 mm. **taurus**
- 18(17). Suprahumeral strongly curved upwardly, oblique, longer; $10-11 \times 9.5$ mm. **assamensis**
- 19(16). Posterior process extended to apex of clavus, suprahumeral subhorizontal, tips obliquely impressed; 8×5 mm. **siamensis**
- 20(15). Tips of suprahumeral obliquely truncate, apical area curved upwardly; posterior process extended far beyond apex of clavus; $10 \times 8-8.5$ mm. **flexuosus**
- 21(4). Suprahumeral shorter than the space between bases, broad, horizontal tips, truncate rounded; posterior process not passing apex of clavus; 8 mm. **neuter**
- 22(3). Apical area of tegmina concolorous hyaline; suprahumeral broadly expanded.
- 23(24). Suprahumeral expanse greater than total length of body to tips of tegmina, more than twice longer than the intervening space, broad, curved upwardly, gradually acuminate, carina above and beneath; posterior process far passing apex of clavus; tegmina smoky hyaline; 11×12 mm. **laticornis**

- 24(23). Suprahumeral expanse slightly less than total length, much longer than the intervening space, broad, oblique, unicarinate above, tips broadly truncate front angle rounded; tegmina ochraceous hyaline; 6.6×6 mm. **shelfordi**
- 25(2). Pronotum black, costal margin of tegmina blackish or brownish.
- 26(31). Apical area of tegmina largely blackish or brownish.
- 27(30). Suprahumeral long as the intervening space nearly horizontal, tips slightly recurved, acute; posterior process straight, extended beyond clavus.
- 28(29). Large; suprahumeral broad, posterior process gradually acuminate; base of tegmina black; $10-12 \times 5$ mm. **erigens**
- 29(28). Small; suprahumeral moderately broad, posterior process with broad, apical area slender; basal third of tegmina obliquely black; $5-6 \times 3-4$ mm. **belus**
- 30(27). Suprahumeral longer than space between bases, diverging, slightly ascending, very broad, tips obtuse; posterior process very slightly curved above scutellum, stout, tip slightly decurved beyond apex of clavus; 5-6 mm. **forticornis**
- 31(26). Apical area of tegmina concolorous hyaline not darker; suprahumeral about as long as space between bases, nearly horizontal, tips acute, slightly recurved.
- 32(35). Length to tips of tegmina more than 10 mm, suprahumeral slightly recurved.
- 33(34). Posterior process extended distinctly beyond apex of clavus, straight, suprahumeral a little longer than the intervening space; 11×7 mm. **ater**
- 34(33). Posterior process extended to apex of clavus, base slightly raised; suprahumeral about as long as the intervening space, bicarinate above; 11×8 mm. **ortus**
- 35(32). Length to tips of tegmina not exceeding 7 mm.
- 36(39). Posterior process extended beyond apex of clavus.
- 37(38). Blackish, suprahumeral reddish brown, (or entirely brown), subhorizontal, margins foliaceous, posterior carina continuous with lateral carina of posterior process whose tip far passes apex of clavus; legs ferruginous; tegmina lurid; 6 mm. **laminifer**
- 38(37). Deep black; suprahumeral broad, acuminate, margins not foliaceous, bicarinate above; posterior process extended slightly beyond apex of clavus; hind tarsi whitish; tegmina testaceous hyaline; 7 mm. **latimargo**
- 39(36). Posterior process extended to apex of clavus straight; suprahumeral moderately broad, obliquely curved upwardly, tips broadly subacute; tegmina shining brown hyaline; legs piceous; 7×5 mm. **bowringi**
- 40(1). Pronotum brown or ochraceous.
- 41(48). Tegmina vinaceous hyaline, costal margin blackish or brownish; tips of suprahumeral rounded.

- 42(45). Apical area of tegmina brownish or blackish.
- 43(44). Brown, frons ferruginous; suprahumeral very broad, dilated toward tips, longer than the intervening space; posterior process about as long as the tegmina, the latter hyaline with base, costal and apical areas ochraceous; 11×9 mm. **alatus**
- 44(43). Shining dark brown; suprahumeral short, hardly as long as the space between bases, broad, auriculate, uncarinate above; posterior process slender, extended beyond clavus; 8 mm. **javanensis**
- 45(42). Apical area of tegmina concolorous hyaline.
- 46(47). Brown; suprahumeral expanse equal to total length to tips of tegmina, tips lightly curved upwardly, upper surface bicarinate; posterior process nearly long as tegmina; 10×10 mm. **longicornis**
- 47(46). Ochraceous; suprahumeral expanse distinctly less than total length to tips of tegmina, long, moderately broad, recurved tips brown and carinate; posterior process extended beyond apex of clavus; $10 \times 7.5-8$ mm. **flavescens**
- 48(41). Entirely brown including the tegmina which has three discoidal cells; suprahumeral long as the space between bases, slightly curved upwardly, bicarinate, rugose above, bicarinate below, tips acute; posterior process slender, slightly sinuate, much longer than clavus; 8×6 mm. **adunctus**

LIST OF SPECIES

- anchorago** Guerin, Icon. Reg. Anim. Ins. iv, p. 367, pl. 69, fig. 4. (1838). Java. *pronotalis* Distant, Ann. Mag. N. H. xvii, p. 317. (1916). Java.
- pactolus** Buckton Mon. Memb. p. 233, pl. 52, fig. 7. (1903). Perak, Malacca.
- tauriformis** Distant, Ann. Mag. N. H. xvii, p. 317. (1916). Java.
- securis** Buckton, Mon. Memb. p. 238, pl. 54, fig. 4. (1903). Sikhim, Mungphu, Naga and Nilgiri Hills, Bombay; Trichur, Cochin State, India. Ruby Mines, Burma. Sandakan, Borneo.
- amplicornis** Stål, Bid. Memb. K. p. 285. (1869). Cambodia, French Indo-China. Siam. Anei Kloof, Sumatra.
- taurus** Distant, Ann. Mag. N. H. xvii, p. 316. (1916). Siamese Malay States.
- assamensis** Fairmaire, Rev. Memb. p. 517. (1846); Distant, Faun. Brit. Ind. iv, p. 34, fig. 28. (1908). Assam, Sikhim, Pankabar, Myitta, Tenasserim, India. Rangoon, Burma. Siam. Malacca.
- costalis* Walker, Ins. Saund. Hom. p. 82. (1858). Unknown.
- siamensis** Distant, Ann. Mag. N. H. xvii, p. 316. (1916). Bulsit Behra, Siamese Malay States.
- flexuosus** Fabricius, Syst. Ent. iv, p. 12. (1794); Buckton, Mon. Memb. p. 237, pl. 54, fig. 1. (1903); Distant, Faun. Brit. Ind. iv, p. 33, fig. 27. (1908). Sylbet, Sikhim, Shillong, Sibsagar, Tenasserim, Myitta, India. Arrakan, Burma, Perak, Malacca.

- neuter** Fairmaire, Rev. Memb. p. 517. (1846). Java.
- laticornis** Funkhouser, Bul. Brook. Ent. Soc. xvi, p. 44, figs. 3, 4. (1921).
Riviere Claire, Haut-Tonkin, Madon, N. Indo China.
- shelfordi** Distant, Ann. Mag. N. H. xvii, p. 315. (1916). Sarawak, Sandakan, Borneo.
- erigens** Walker, List Hom. B. M. p. 614. (1851). Philippines.
mounseyi Distant, Ann. Mag. N. H. xvii, p. 150. (1916). Philippines.
- belus** Buckton, Mon. Memb. p. 232, pl. 52, fig. 3. (1903). Unknown.
asmodeus Distant, Faun. Brit. Ind. iv, p. 36. (1908). Tenasserim, Myitta, India. Singapore. Sandakan, Sarawak, Kapit, Borneo.
- forticornis** Walker, Jour. Linn. Soc. x, p. 185. (1868). Celebes Is.
- ater** Buckton, Mon. Memb. p. 238, pl. 54, fig. 5. (1903). Ruby Mines, Burma.
- ortus** Distant, Faun. Brit. Ind. iv, p. 35. (1908). Trivandrum, Madras, India.
- laminifer** Walker, Jour. Linn. Soc. i, p. 93. (1856); Buckton, Mon. Memb. p. 240, pl. 55, fig. 3. (1903). Sarawak, Borneo, Singapore.
- latimargo** Walker, Jour. Linn. Soc. i, p. 163. (1857). Sarawak, Borneo.
- bowringi** Distant, Ann. Mag. N. H. xviii, p. 291. (1916). Penang, Malacca.
- alatus** Buckton, Mon. Memb. p. 237, pl. 54, fig. 2. (1903). Perak, Malacca.
perakensis Distant, Ann. Mag. N. H. xvii, p. 318. (1916). nom. nud.
- javanensis** Fairmaire, Rev. Memb. p. 517. (1846). Java.
- longicornis** Vuillefroy, Ann. Soc. Ent. Fr. (4), iv, p. 142, pl. 1, fig. 8. (1864). Malay Islands. Sarawak, Borneo.
- flavescens** Distant, Faun. Brit. Ind. iv, p. 35. (1908). Dehra Dun, N. India.
- adunctus** Buckton, Mon. Memb. p. 236, pl. 53, fig. 6. (1903). Luzon, Philippines.
brunneus Funkhouser, Jour. Str. Br. Roy. Asiat. Soc. No. 82, p. 207, figs. 1, 2. (1920). Sandakan, Borneo.

Pogon

Buckton, Mon. Memb. p. 248. (1903).

KEY TO SPECIES

- 1(6). Suprahumerals half as long as space between bases, oblique, posterior process longer than clavus, apex decurved.
- 2(5). Posterior process impinging upon scutellum and margins of tegmina.
- 3(4). Pale yellow, base of metopidium piceous, brown beneath supra-humerals; posterior process robust, with several elevated lines extended on disk and supra-humerals, straight, apical area slender; tegmina pale yellow hyaline; 5×2.5 mm. **flavescens**
- 4(3). Ferruginous, tegmina ferruginous hyaline; posterior process slender, weakly sinuate; 5 mm. **ferrugineum**

- 5(2). Posterior process slightly but distinctly elevated above the scutellum and margins of tegmina, slender, sinuate; ferruginous; tegmina pale ferruginous hyaline, base and costal area darker; 5.5×2 mm. **auriculatum**
- 6(1). Suprahumeral long as or longer than space between bases, posterior process substraight, slender, impinging upon scutellum and margins of tegmina, passing apex of clavus.
- 7(12). Suprahumeral oblique.
- 8(11). Brown.
- 9(10). Purplish brown, legs testaceous, tegmina purplish brown, apical area ochraceous; suprahumeral slightly longer than the intervening space; 5.5×3 mm. **cupreum**
- 10(9). Pale brown, tegmina pale brown with fuscous waved markings; suprahumeral long as the intervening space; 6×4 mm. **incurvatum**
- 11(8). Black, legs pale brown, tegmina bronze brown, large basal area and large spot behind clavus black, a white discal spot; suprahumeral slightly longer than intervening space; 5.5-6 mm. **albosignatum**
- 12(7). Suprahumeral horizontal, long as space between bases; black, legs brown, tegmina dark brown, apical area paler, veins pilose, pale spot near clavus; 6×3.5 mm. **atricoxis**

LIST OF SPECIES

- flavescens** Goding, Am. Mus. Novit. No. 421, p. 25. (1930). N. S. W., Australia.
- ferrugineum** Melichar, Hom. Ceylon, p. 114. (1903). Peradeniya, Henratgoda, Ceylon.
- auriculatum** Stål, Bid. Memb. K, p. 285. (1869); Distant, Faun. Brit. Ind. iv, p. 44, fig. 36. (1908). Horton Plains, Madulsima, Ceylon.
- cupreum** Kirby, Jour. Linn. Soc. Zool. xxiv, p. 168. (1894); Buckton, Mom. Memb. p. 228, pl. 50, fig. 8. (1903). Badulla, Maskeliya, Kandy, Madulsima, Pundaluoya, Ceylon.
- incurvatum** Buckton, Mon. Memb. p. 248, pl. 58, fig. 6. (1903); Distant, Faun. Brit. Ind. iv, p. 42, fig. 34. (1908). Pattipola, Ceylon.
- albosignatum** Distant, Faun. Brit. Ind. vi, App. p. 161, fig. 119. (1916). Pundaluoya, Hakgala, Ceylon.
- atricoxis** Melichar, Hom. Ceylon, p. 113. (1903). (nec. Kirby); Distant, Faun. Brit. Ind. iv, p. 43, fig. 35. (1908). Peradeniya, Pattipola, Kandy, Nawalapitya, Ceylon.

*Micreunini***Micreune**

- Walker, Jour. Linn. Soc. i, p. 94. (1856).

KEY TO SPECIES

- 1(2). Superior margin of summit of front process sinuate, notched at middle, lateral spines depressed, width between their tips about

- equal to width between the humerals, posterior lobes equally prominent; piceous brown, tips of lateral spines, posterior process except apex, body and legs yellow, or entirely ochraceous yellow; tegmina ochraceous; $6-7 \times 2-2.5$ mm. *monstrifera*
- 2(1). Superior margin of summit of front process strongly convex, not notched at middle.
- 3(4). Posterior margin of front process with a large lobe just beneath summit and another at base, lateral spines moderately depressed, width between their tips nearly equal to width between humerals; entirely dark brown, tegmina paler brown; 6×5 mm. *cassis*
- 4(3). Posterior margin of front process sinuate, emarginate at middle weakly lobed above and below it, width between tips of lateral spines distinctly less than width between humerals; piceous brown with reddish lines, basal half of posterior process and legs yellowish; tegmina ferruginous; 5×1.25 mm. *clavata*

LIST OF SPECIES

- monstrifera* Walker, Ins. Saund. Hom. p. 80. (1858); Goding, Mon. Aust. Memb. p. 34, pl. 1, figs. 10, 11, 26. (1903). Hunter and Tweed Rivers, N. S. W.; Morton Bat (Brisbane), Rockhampton, Queensland, Australia.
- pondifer* Walker, Jour. Ent. i, p. 316. (1862). Australia.
- cassis* Buckton, Mon. Memb. p. 60, pl. 9, fig. 3, (♀). (1903). North Australia.
- diadema* Kirkaldy, Rept. Exp. St. Haw. S. P. Assoc. ix, p. 372-3, pl. 30, figs. 2, 3. (1906). Kuranda, North Queensland, Australia.
- cassis* Buckton, Mon. Memb. p. 60, pl. 9, fig. 2, (♂). (1903). North Australia.
- clavata* Kirkaldy, Rept. Exp. St. Haw. S. P. Assoc. ix, p. 372-3, pl. 30, figs. 4, 5. (1906). North Queensland, Australia.

(to be continued)